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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,271	05/02/2001	Shimon Ben-David	P-3347-US	6125

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EXAMINER	
PHAM, TUAN	

ART UNIT	PAPER NUMBER
2643	7

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,271	BEN-DAVID, SHIMON	
	Examiner	Art Unit	
	TUAN A PHAM	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *May 12 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16, and 18-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16, and 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5, 10-14, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Roos (U.S. Patent No.: 6,577,882).

Regarding claims 1 and 14, Roos teaches a system in a customer premises (see figure 1, CPE side 110) comprising:

at least one local power unit coupled to an electrically-conductive line (see figure 1, local power P 112, col.3, ln.26-32); and

a power-feeding unit coupled to the line (see figure 1, power feeding P-NT, col.3, ln.45-50), the power-feeding unit adapted to provide power over the line to the at least

one local power unit without disturbing operation of an exchange coupled to the line (see figure 1, col.3, ln.26-56).

Regarding claims 2 and 3, Roos further teaches the system wherein the line is an internal telephone line and internal cable (see figure 1, col.2, ln.45-49).

Regarding claim 4, Roos further teaches the exchange is a private branch exchange. It is inherently the system of Roos should be included the PBX (see figure 1).

Regarding claim 5, Roos further teaches the system wherein the exchange is a central office (see figure 1, CO side 120).

Regarding claim 10, Roos further teaches at least one local power unit is integrated into a current-consuming device (see figure 2, diode 201).

Regarding claims 11 and 18, Roos further teaches a power-feeding unit adapted to provide power over an electrically conductive line by feeding alternate current or direct current to the line without disturbing operation of an exchange coupled to the line (see figure 1, power feeding P-NT, col.3, 26-56).

Regarding claims 12-13, and 19-20, Roos further teaches the system wherein the line is an internal telephone line and internal cable (see figure 1, col.2, ln.45-49).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roos (U.S. Patent No.: 6,577,882) in view of Atou et al. (U.S. Patent No.: 6,111,764, hereinafter, "Atou").

Regarding claim 6, Roos teaches a system in a customer premises (see figure 1, CPE side 110) comprising:

at least one local power unit coupled to an electrically-conductive line (see figure 1, local power P 112, col.3, ln.26-32); and

a power-feeding unit coupled to the line (see figure 1, power feeding P-NT, col.3, ln.45-50), the power-feeding unit adapted to provide power over the line to the at least one local power unit without disturbing operation of an exchange coupled to the line (see figure 1, col.3, ln.26-56).

It should be noticed that Roos fails to clearly teach the power-feeding unit comprises: an alternating current power supply, and a control unit coupled to the alternating current power supply. However, Atou teaches such features (see figure 1, AC power supply 1, control unit 8, col.4, ln.55-65) for a purpose of supplying the power to subscriber lines.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of power-feeding unit comprises: an alternating current power supply, and a control unit coupled to the alternating current power supply, as taught by Atou, into view of Roos in order to prevent the power failure.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roos (U.S. Patent No.: 6,577,882) in view of Yano (U.S. Patent No.: 6,246,748).

Regarding claim 7, Roos teaches a system in a customer premises (see figure 1, CPE side 110) comprising:

at least one local power unit coupled to an electrically-conductive line (see figure 1, local power P 112, col.3, ln.26-32); and

a power-feeding unit coupled to the line (see figure 1, power feeding P-NT, col.3, ln.45-50), the power-feeding unit adapted to provide power over the line to the at least one local power unit without disturbing operation of an exchange coupled to the line (see figure 1, col.3, ln.26-56).

It should be noticed that Roos fails to clearly teach the power-feeding unit comprises: a line state detector; and a switch adapted to couple one of an alternating current power supply and a direct current power supply to the line according to a specific line state detected by the line state detector. However, Yano teaches such features (see figure 1, detector 106, switch SW1, col.6, ln.1-52) for a purpose of detecting the current on communication lines.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the power-feeding unit comprises: a line state detector; and a switch adapted to couple one of an alternating current power supply and a direct current power supply to the line according to a specific line state detected by the line state detector, as taught by Yano, into view of Roos in order to provide a power to subscriber lines.

6. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roos (U.S. Patent No.: 6,577,882) in view of Stiefel (U.S. Patent No.: 5,659,608).

Regarding claim 15, Roos teaches a method comprising: providing power over an internal telephone line without disturbing operation of an exchange coupled to the internal telephone line (see figure 1, col.3, ln.26-56).

It should be noticed that Roos fails to clearly teach the method wherein the providing comprises: supplying alternating current over the internal telephone line when the internal telephone line is on hook; and supplying only direct current over the internal telephone line when the internal telephone line is off hook. However, Stiefel teaches such features (see col.2, ln.54-67) for a purpose of providing the current to the telephone lines.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of alternating current over the internal telephone line when the internal telephone line is on hook; and supplying only direct current over the internal telephone line when the internal telephone line is off hook, as taught by Stiefel, into view of Roos in order to conserve the power to the telephone loop.

Regarding claim 16, Stiefel further teaches the method comprising: supplying at most an additional alternating current to alternating current arriving from the exchange when the exchange is generating a ring signal on the internal telephone line (see col.2, ln.14-36).

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roos (U.S. Patent No.: 6,577,882) in view of Yano (U.S. Patent No.: 6,246,748) as applied to claim 1 above, and further in view of Atou et al. (U.S. Patent No.: 6,111,764, hereinafter, "Atou").

Regarding claim 8, Roos and Yano, in combination, fails to clearly teach the power-feeding unit further comprises a polarity detector (i.e., rectifier) and the direct current power supply is adapted to supply power to the line according to a polarity detected by the polarity detector. However, Atou teaches such features (see col.2, ln.7-44) for a purpose of detecting off or on-hook on telephone lines.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of power-feeding unit further comprises a polarity detector (i.e., rectifier) and the direct current power supply is adapted to supply power to the line according to a polarity detected by the polarity detector, as taught by Atou, into view of Roos and Yano in order to prevent the power failure.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roos (U.S. Patent No.: 6,577,882) in view of Yano (U.S. Patent No.: 6,246,748), and further in view of Atou et al. (U.S. Patent No.: 6,111,764, hereinafter, "Atou") as applied to claim 1 above, and further in view of Szlam (U.S. Patent No.: 4,742,538).

Regarding claim 9, Roos, Yano, and Atou, in combination, fails to clearly teach wherein the power-feeding unit further comprises a voltage detector, a ring detector and a speech detector. However, Szlam teaches such features (see figure 2, voltage

suppressor 106, ring detector 110, speech detector 115, col.14, ln.45-57) for a purpose of detecting off or on-hook on telephone lines.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of power-feeding unit further comprises a voltage detector, a ring detector and a speech detector, as taught by Szlam, in view of Roos, Yano, and Atou in order to prevent the power failure.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Nishimura (U.S. Patent No. 5,568,547), De Nicolo (U.S. Patent No. 6,295,356), Miyamoto (U.S. Patent No. 6,681,013), and Ortel (U.S. Patent No. 6,157,716) are not applied into this Office Action, they are also called to Applicants attention. They may be used in future Office Action(s). These references are also concerned for supporting the system and method for providing a power feed circuit to support both on or off-hook for telephone subscriber loop and power feed for network devices

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (703) 305-4987. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (703) 305-4708 and

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